

CLAIMS

1. Induction furnace including a side wall (2) essentially comprising vertical side-by-side segments (20), characterized in that the segments are coated with ceramic (22) at least on inner (24) and side faces (25,26), and at least the sharp edges (28,29) joining said inner faces to said side faces are rounded.

2. Induction furnace as in claim 1, comprising a hearth on which the side wall is positioned, characterized in that the hearth is provided with cooling boxes (48) coated with ceramic (52) at least on upper faces (51), and at least the sharp edges (53) delimiting said upper face (51) are rounded.

3. Crucible for induction furnace as in claim 1 or 2, characterized in that the segments are also coated with ceramic on outer faces (27).

4. Induction furnace as in claim 2, characterized in that the cooling boxes are also coated with ceramic on lower faces (54) and side (55) faces.

5. Induction furnace as in any of the preceding claims, characterized in that the segments are provided with lugs (32) for assembly with an upper flange, and in that the flange is coated with ceramic at least on one face touching the segments.

6. Induction furnace as in any of claims 1 to 5, characterized in that the faces of the segments and cooling boxes which are coated with ceramic are joined together by rounded or chamfered edges (28,29, 30,31).

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7. Induction furnace as in any of claims 1 to 6, characterized in that the ceramic base is chosen from among mullite, alumina, cordierite, zircon, zirconia and zirconate.

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